

**WHAT IS CLAIMED IS: (US claims)**

1. An alert method relating to a remaining fuel amount of a fuel cell system, comprising the steps of:

switching over operation/stopped states of the fuel cell system;

5 detecting that the state of the fuel cell system is switched over to a stopped side; and

communicating information related to the remaining fuel amount to a user when fuel of the fuel cell system is consumed in a state where the switch is switched over to a stopped side.

10

2. The alert method according to claim 1, wherein

at least a step of generating an alert for the user when fuel of the fuel cell system is consumed and the remaining fuel amount falls to an alert generating level is included in the step of communicating information related to the remaining fuel amount.

15

3. The alert method according to claim 2, wherein

the generation of the alert is implemented when fuel is consumed due to the fuel cell system performing a heat-retention operation.

20

4. The alert method according to claim 2, wherein

the alert is sent to an information terminal of the user using wireless communication.

25

5. The alert method according to claim 2, wherein

the generation of the alert is implemented multiple times in response to the remaining fuel amount.

30

6. The alert method according to claim 2, wherein

the fuel cell system is mounted in a moving body, and the alert includes information related to at least one of a remaining fuel amount, a possible remaining heat-retention operation time of the fuel cell system, a possible remaining running mileage of the moving body, and a distance to the nearest fuel station.

7. The alert method according to claim 6, wherein  
the alert generating level is set such that the possible remaining running  
mileage of the moving body includes a margin with respect to the distance to the  
5 nearest fuel station.

8. An alert method relating to a remaining fuel amount of a fuel cell  
system mounted in a moving body, comprising the steps of:  
switching over operation/stopped states of the moving body;  
10 detecting that an ignition switch of the moving body is switched over to a  
stopped side; and  
communicating information related to the remaining fuel amount when fuel of  
the fuel cell system is consumed in a state where the switch is switched over to a  
stopped side to an information terminal of a user at a location away from the moving  
15 body using wireless communication.

9. The alert method according to claim 8, wherein  
the communication is conducted at every fixed time period.

20 10. The alert method according to claim 8, wherein  
the communication is conducted when the remaining fuel amount falls to an  
alert generating level.

11. The alert method according to claim 8, wherein  
25 the communication is conducted in response to a request from the user.

12. The alert method according to claim 8, wherein  
the fuel cell system stops consumption of the fuel in response to a system stop  
command after receiving the system stop command from the user.

30 13. A fuel cell system, comprising:  
a switch which switches over operation/stopped states of the fuel cell system;  
a fuel storage unit which stores fuel supplied to the fuel cell system;

a remaining amount measuring unit which measures a remaining fuel amount in the fuel storage unit; and

a communication unit which communicates information related to a remaining fuel amount when fuel in the fuel storage unit is consumed to the user in a state where the switch is switched over to a stopped side.

14. The fuel cell system according to claim 13, wherein the communication of information related to the remaining fuel amount includes at least generating an alert for the user when fuel in the fuel storage unit is consumed and the remaining fuel amount falls to an alert generating level.

15. The fuel cell system according to claim 14, wherein the generation of the alert is implemented when fuel is consumed due to the fuel cell system performing a heat-retention operation.

16. A fuel cell system mounted in a moving body, comprising:  
a switch which switches over operation/stopped states of the fuel cell system;  
a fuel storage unit which stores fuel supplied to the fuel cell system;  
a remaining amount measuring unit which measures a remaining fuel amount in the fuel storage unit; and  
a communication unit which communicates information related to the remaining fuel amount when fuel in the fuel storage unit is consumed to an information terminal of a user at a location away from the moving body using wireless communication in a state where the switch is switched over to a stopped side.

17. A fuel cell system mounted in a moving body, comprising:  
a switch which switches over operation/stopped states of the fuel cell system;  
a fuel storage unit which stores fuel supplied to the fuel cell system;  
a remaining amount measuring unit which measures a remaining fuel amount in the fuel storage unit; and

a control unit which controls an operation of the fuel cell system such that consumption of the fuel is stopped when the remaining fuel amount falls below a predetermined reference value, and setting different values for a first reference value that is the predetermined reference value in a state where the switch is switched over

to a stopped side and a second reference value that is the predetermined reference value in a state where the switch is switched over to an operation side.

5           18.       The fuel cell system according to claim 17, wherein  
the first reference value is set for a temporary operation in which fuel in the  
fuel storage unit is consumed, and  
the second reference value is set for normal operation in which the fuel cell  
system is operating.

10           19.       The fuel cell system according to claim 18, wherein  
the temporary operation is a heat-retention operation.

15           20.       The fuel cell system according to claim 17, wherein  
the first reference value is set to a value greater than the second reference  
value.

20           21.       The fuel cell system according to claim 17, wherein  
the first reference value is set to a value allowing normal operation of the fuel  
cell system to be continued over a time period decided by a predetermined condition  
or longer.

25           22.       The fuel cell system according to claim 17, further comprising:  
a communication unit which communicates information related to a remaining  
fuel amount when fuel in the fuel storage unit is consumed to a user in a state where  
the switch is switched over to the stopped side.

23.       The fuel cell system according to claim 17, wherein  
the switch is an ignition switch of the moving body.